

and movements of objects in a medical services business, without requiring modification of individual behaviors and with minimal or no expenditure of time or personnel resources. The resulting cost figures and other information, compiled in procedure records 163, may be advantageously used to accurately track and control costs of providing services in areas where such tracking and control has previously been difficult or unavailable.

Referring now to FIG. 10, in one embodiment of the present invention, cost tracking information generated at two or more patient care facilities 350, 352 may be forwarded via telephone lines 353 or another suitable communications connection, to a central caregiver monitoring center 354, for example a hospital chain headquarters or insurance provider home office, so that cost tracking information from multiple patient care facilities may be readily compared and contrasted. Furthermore, in one embodiment some or all of the processing performed by computer circuitry 30 as described may be performed at the central monitoring center 354 using databases stored at the central monitoring center 354. In the latter case, for example, only tag reader messages and information needed to initialize schedule records 154 and procedure records 163 need be transferred over telephone lines 353, with all remaining processing performed at monitoring center 354. Tag reader messages might be transmitted over telephone lines 353 in real time, or alternatively might be stored at the patient care facility along with a time stamp, and then the collection of time stamped tag reader messages forwarded in a batch to the monitoring center 354 and processed collectively as if they were received in real time at the times indicated in the associated time stamps.

While the present invention has been illustrated by a description of various embodiments and while these embodiments have been described in considerable detail, it is not the intention of the applicant to restrict or in any way limit the scope of the appended claims to such detail. Additional advantages and modifications will readily appear to those skilled in the art. The invention in its broader aspects is therefore not limited to the specific details, representative apparatus and method, and illustrative example shown and described. Although supplies typically would be considered as tools and the like used by medical care givers, supplies is used herein in a broader sense to include any items used on or with a patient and thus includes pharmaceutical compounds, doses or injectables to be given to a patient. Accordingly, departures may be made from such details without departing from the spirit or scope of applicant's general inventive concept.

What is claimed is:

1. An activity-based cost tracking system for tracking the costs of an activity undertaken within a defined space by a person or an object having an assignable cost, comprising
  - a first transponder attached to a person or an object participating in said activity, said first transponder providing a unique identifying code,
  - a transponder reader associated with said defined space reading said first transponder and receiving said code to identify said first transponder,
  - a database associating said code with said person or object to which said first transponder is attached, and assigning a cost to said person or object, and
  - a cost computer responsive to said transponder reader and said database for identifying said person or object to which said first transponder is attached, identifying an activity being undertaken by said person or object,

from a plurality of activities that might be undertaken in said defined space, determining the time during which said person or object is occupied in said activity, and computing therefrom a cost of said activity undertaken by said person or object within said defined space.

2. The system of claim 1 wherein

said transponder reader is associated with an entry to said defined space and detects passage of said first transponder through said entry, and

said cost computer determines the time during which said person or object is occupied in said activity by recording the duration between times at which said transponder is detected passing through said entry.

3. The system of claim 1 wherein said first transponder is attached to a person,

further comprising a second transponder attached to an additional person and providing a second unique identifying code;

wherein said database associates said second code from said second transponder with said additional person, and assigns a cost to said additional person, and

said cost computer responds to said transponder reader and said database for computing a cost of activities undertaken by both said persons within said defined space.

4. The system of claim 1 wherein said reader communicates with said transponders via wireless radio frequency communication.

5. The system of claim 1 wherein said reader communicates with said cost computer via wireless radio frequency communication, whereby said reader may be rapidly positioned to track costs in different defined spaces.

6. The system of claim 1 wherein

said cost computer tracks total time in which said person or object is occupied in said activities,

said database stores a time cost rate for said person or object, and

said cost computer computes costs for activities based on a time cost rate for said person or object and the time said person or object was occupied by said activities.

7. The system of claim 1 wherein

said cost computer tracks the time for which said person or object is occupied in said activities, and

said cost computer accumulates time for which said person or object is occupied in a plurality of different activities and stores the accumulated time in said database,

whereby the time spent in multiple activities may be accurately determined for performance evaluation or maintenance purposes.

8. The system of claim 1 wherein

said database indicates a number of activities undertaken by said person or object, and

said cost computer increases the number of activities undertaken by said person or object whenever said person is detected participating in an activity,

whereby the number of activities engaged by said person may be accurately determined for performance evaluation or maintenance purposes.

9. The system of claim 1 wherein said database stores a cost per usage for said object and said cost computer computes costs for activities of said object based on said cost per usage.